

NC6 Series
AC Contactor

User Instruction

Safety Warning

- ① Only professional technicians are allowed for installation and maintenance.
- ② Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
- ③ When the product is being installed or maintained, the power must be switched off.
- ④ You are prohibited from touching the conductive part when the product is operating.

1 Use Purpose

Nc6 series AC contactor is mainly used in AC 50Hz (or 60Hz) circuits with rated operating voltage up to 690V. It can be used to frequently start and control AC motor or connect and disconnect circuit remotely under 400V (380V) AC-3 application category. It can also be used with proper thermal overload relay to act as electromagnetic starter.

2 Key Technical Parameters

2.1 See Table 1 for installation and operation conditions of the contactor.

2.2 See Table 2 for the key technical parameters and performance index of the contactor.

Table 1 Installation and operation conditions

Installation and operation conditions	
Ambient temp. (°C)	-5°C~+40°C, average temperature should not exceed +35°C within 24h.
Hot and humid atmospheric conditions	Relative humidity should not exceed 50% at temperature up to +40°C, higher relative humidity is allowed under lower temperature, for example up to 90% at +20°C. User should take special measures against condensation due to temperature change.

Continued Table 1

Installation and operation conditions	
Altitude	Not higher than 2000m
Pollution class	Class 3
Installation category	III
Installation conditions	The angle between the installation surface and the vertical surface should not be bigger than $\pm 30^\circ$.
Impact vibration	The product should be installed and used at places free from significant shaking, impact and vibration.
Enclosure protection class	IP00

Table 2 Key technical parameters

Model			NC6-06	NC6-09
Rated operating current A	380V	AC-3	6	9
		AC-4	6	9
	660V 690V	AC-3	3.8	5
		AC-4	3.8	5
Conventional free air thermal current A			20	
Rated insulation voltage V			690	
Rated impulse withstand voltage kV			8	

Continued Table 2

Model		NC6-06	NC6-09
Rated limited short-circuit current I _q (KA)		50	
Power of controllable 3-phase squirrel cage motor (AC-3)	220/230V	1.5	2.2
	380/400V	2.2	4
	660/690V	3	4
AC-3 electrical life (10 ⁴ times)		120	
Mechanical life (10 ⁴ times)		1000	
Operating frequency Times/h	Electrical life	AC-3	1200
		AC-4	300
	Mechanical life		3600
Fuse model		RT16-16	RT16-20
Rated current of fuse(A)		16	20
Model of thermal overload relay		NR2-11.5	
Coordination type with SCPD		Type "1" coordination	
Tightening torque of wiring terminal N.m		0.5	
Coil pick-up power	50Hz	Pick-up VA	30
		Hold VA	4.5

Continued Table 2

Model		NC6-06				NC6-09			
Operation range		Pick-up voltage: (85%~110%)Us Release voltage: (20%~75%)Us							
Auxiliary contacts	Basic parameters	I _{th} :10A							
		AC 15				I _e :0.95A(AC 400V)			
		DC 13				I _e :0.15A(DC 230V)			
	Combination	Four groups				Two groups			
NCF6-40		NCF6-31	NCF6-22	NCF6-13	NCF6-04	NCF6-20	NCF6-11	NCF6-02	

3 Installation

3.1 Outline and installation dimensions

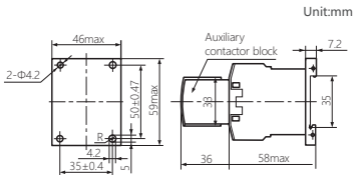


Figure 1 Outline and installation dimensions

3.2 Product installation diagram

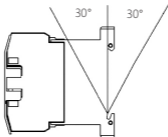


Figure 2 Installation diagram

4 Maintenance

Check if the contactor can operate reliably every month.
Method: Check if the contact incline 5° forward upon pick-up and incline 5° backward upon release.

Conduct maintenance every month. **Note: Do not disassemble, assemble and repair the product at will. Replace the product if it is found to be damaged.**

Table 3 Analysis and Troubleshooting of Faults

Symptoms	Cause analysis	Troubleshooting method
The product does not operate or does not operate reliably	Inconsistency between control power voltage and coil voltage.	Use control power supply that complies with coil voltage.
	Insufficient operation circuit power capacity or disconnection or wrong connection exists in the circuit.	Check the circuit to ensure correct connection.
	Coil burnt; mechanical movable parts jammed.	Replace the coil, remove foreign objects or replace the product.
Noise	There are foreign objects on the polar face of magnet yoke or armature.	Clean the polar face of the iron core.
	The voltage of control power supply is too low.	Use control power supply that complies with coil voltage.
The product does not release or release slowly	Contact welding	Replace the product.
	There is oil or dust on the polar face of the iron core.	Clean the polar face of the iron core.

5 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling according to local regulations.

CHINT

QC PASS

NC6 Series
AC Contactor
IEC/EN 60947-4-1

Check 05

Test date: Please see the packing

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AC Contactor
User Instruction

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